1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

603 604 educate and to assist him. However, his grandchildren belong to his own moiety and the children of his daughters will be born in this camp and will live with him until the boys are old enough to seek wives in the other moiety. The bonds linking these nephews, uncles, grandparents, and grandchildren are morally strong and perhaps it explains why Kuma herself is thought of as being the grandmother of Hatchawa, rather than the mother. Several myths illustrate this uncle, nephew, grandfather, and grandchild relationship. It is curious to note that occasionally the uncle in these myths plays tricks on the nephew and may even be represented as being exceedingly wicked, but the grandfather is always benevolent.

[591] The children of a man's sons are brought up in a different hunting group, since the boys will live with their wives' groups, and although these grandchildren belong to the same moiety, the old man's contact with them is rather limited. It is different with the children of his daughter.

182 582 The basis of Yaruro social organization is cross-cousin marriage. Each hunting group tends to consist of one family and other groups hunting nearby are probably closely related to it. The chance of a member of one group meeting members of a group hunting far away from his hunting grounds would be quite insignificant. It would appear, therefore, that a Yaruro man would have the option to marry his sister's cousins, aunts, grandchildren, and grandparents. Of these [584] it is considered incest to marry his sisters, his mother, and the sisters of his mother, whom he calls mother also, the children of his father's brothers, whom he calls father, and the children of his mother's sisters, whom he calls sister also. The only two classes of women whom he can legitimately marry are the daughters of his mother's brothers and the daughters of his father's sisters. The latter, how- [616] ever, belong to the same moiety as himself and are therefore excluded. His choice is restricted to the daughters of his mother's sisters.

However, a number of factors may enter to allow a man a wife other than his cross cousins on his mother's side, and in fact in some cases he is forced to marry others than his cross cousins on his mother's side, who may not be available. Theoretically he may marry any of the following: His father's sisters, his father's mother's sisters, his daughters' daughters, his wife's sisters, his wife's mother's sisters, and his wife's mother's mother and her sisters. We find in actual practice that this is done. At Landaeta there was one young man married to a woman of about 40 whom we would call his aunt-in-law, that is, his wife's mother's sister.

587 This class of women whom he is allowed to marry he is also obligated to look after should their husbands die. For instance, should

1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

any of his brothers die he falls heir to the brother's wife or wives, who may be sisters or sisters of his own wife; likewise, should his mother's brother die his wife or wives, who is one of the group of his wife's mother's sister, would also become his wife. This system can be made plainer by examining figure 24. By following the moiety relationship one can see just whom the individual is allowed to marry. If it is considered that any of these individuals may actually become his wife, either because there are no other women of his own age group available, or because they have lost their own husbands, and therefore need a protector, the system becomes clear.

IN-LAW RELATIONS

Cross-cousin marriage being the prevalent type, it means that the son of a man's sister will marry his daughter and come to live with him. As soon as that happens a number of social taboos are imposed on the in-laws. The son-in-law from the time that he marries is prohibited from speaking to his mother-in-law, although he lives with the same hunting group and may even travel in the same canoe with her; he cannot eat before her or even near her; he cannot go close to her, even though his bows and arrows may be lying there; he cannot hand her any object; he cannot make his personal toilet in front of her; he cannot sing or dance close to her; he cannot travel alone with his mother-in-law, and if they are forced to travel together in a canoe with the wife of the son-in-law as one of the party, he takes his position in the bow and the mother-in-law sits in the stern. These taboos are reciprocal. If the two meet in a path they turn aside and go in opposite directions.

These taboos are the more remarkable since there are positive duties owed one in-law to the other. The son-in-law is obligated to supply food and protection to his mother-in-law. It is his duty to prepare firewood and bring her materials which she may need to make basketry. It is expected that he will gather delicacies for her, such as honey. On the other hand, his mother-in-law will often prepare food for her son-in-law, will make pouches for him, and show him favors in other ways. But these favors must be transmitted through the wife and daughter, or through other persons. In camp I have seen mother-in-law and son-in-law sitting with backs to each other hour after hour, day after day, never exchanging a word, always averting their eyes from the other's person.

Similar taboos are practiced between the father-in-law and daughter-in-law, but because the girl lives with her parents they weigh less heavily upon her and her father-in-law, since they rarely meet. The taboos, though, are more strictly observed, probably on account of the sexual temptation.

1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

INHERITANCE OF WIVES

583 Monogamy is the usual rule, but occasionally both polygyny and polyandry exist. If no women are available, a man may share his young wife with his brother or parallel cousin whom he calls brother also. I saw two such cases. In a tribe whose total membership may not exceed 150 such situations may easily arise.

587 589 The more common situation is the inheritance of wives. If a man dies, his wife may be taken care of by her father, but more often by her former husband's brother. She takes her place as wife number two, especially if he is a good hunter. Other women whom a man may inherit as wives are his aunts on his father's side and even his paternal grandmother. I saw one case in which a man had inherited his daughter's child. Whether these cases represent the results of [616] deculturation of the Yaruros in recent years, or pure necessity, it is impossible to say. It is worth noting that the taboo on marrying a member of one's moiety is strictly observed.

512 605 Another relationship common among South American Indians which is present among the Yaruros is the hunting friendship between two men. Seldom does one meet a young Yaruro who does not have a hunting companion. Upon marriage this relationship may be weakened, though often the companionship persists. Generally the men are two parallel cousins. They show much affection toward each other, even in camp. For instance, such a pair standing with arms around each other's necks is a common sight. I have no reason to suspect any abnormal sexual relations between such couples.

124 582 [165] An attempt was made to collect genealogies, but no satisfactory results were obtained, due to the confusion that exists among the Yaruros. So many have suffered premature death, especially men, that the genealogies show a tremendous complexity. This complexity exists, of course, only for us. The Yaruro has his system, which is to guard against incest as he defines it. So long as members of the same moiety do not marry, everything else is permissible. One's cross cousin of the same, or nearly the same, age is the preferential choice, but the Yaruros cannot control birth and death, so that the preference is purely theoretical. I saw young boys married to old women and young girls married to old men. The answer was that there weren't any others to marry.

However, enough was gathered from the genealogies to verify the system as described: Members of the same moiety do not marry. Every one else can, except father and daughter, and, of course, father's brothers and daughter, whom she addresses as father anyway.

50% of the diet or a little less. The ideal figures would again be reduced, on the other hand, by allowing for the predations on gardens of animals, especially the pigs, which eat manioc and corn, the Guahibo Indians who allegedly steal sugar cane, and insect losses. Our figures, then, will be modified only a few units by the additional sources of foods. We may thus revise our population figure to between 100 and 105 (or, if a 15-year fallow period is assumed, the figure would be 75-80), figures which correspond to the Yaruro's own ideal of what a proper population for this area should be. If the population increased beyond this number of people, the Yaruro would have to exploit their gardens at a rate greater than the rate of land reconstitution, and also expand hunting, fishing, and gathering beyond the average long-term carrying capacity of the savanas and the rivers, thus reducing their potential productivity. Adding together the maximum populations supportable by these food resources, as well as by the recently introduced pigs, a figure approximating 125-150 persons might be reasonable for this particular territory. This gives a density of 2 persons per sq. mile, a characteristic figure for tropical forest tribes.[15]

If the population rose beyond this maximum capacity of the land-technology relationship, groups would either have to fission off, go on the warpath, regulate population by any of a number of internal institutions such as infanticide, or die either from extreme famines or from steady nutritional deficiency. Under present population conditions none of these is necessary, yet both fissioning and population regulation by contraception occur. Fissioning appears to be fostered by the search for settlement locations requiring minimum labor for maximum return and also to establish community authority under the person leading the fissioning group independent of that excercised by the community from which fissioning took place. Contraception appears to be a matter of choice revolving about maintaining a certain freedom from the cares of motherhood until such time as the marriage partners are reasonably convinced that the marriage is permanent. Indirectly, this contributes to the distribution of more effective female producers among the more effective male producers in the most productive areas, since a second marriage often involves shifting to a generally more effective husband whereas a shift to a less effective husband is scarcely to be found. Both fissioning and contraception, however, give evidence of techniques which were developed to handle man-food balance in happier days.

A number of formal characteristics of any ecology may permit us to deduce the form of society which would be expected on the basis of such characteristics. In so far as the ecological forms were to remain essentially unchanged over great periods of time, no changes in the forms of the social order attached to the ecological conditions would be expected. An internal equilibrium is maintained until such time as a dynamic imbalance occurs because of changes from internal or external sources. It is essential to examine to what extent the internal equilibrium prevents or fosters the occurence of dynamic imbalances in any particular ecological setting. We shall return to this question after the following itemization of Yaruro ecological forms.

[15] [For footnote see p. 43, category 116 -- Analyst]